



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,701	10/05/2001	Shigenobu Maeda	214702US2	1793

22850 7590 09/22/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

HOLZEN, STEPHEN A

ART UNIT PAPER NUMBER

3644

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/970,701

Applicant(s)

MAEDA, SHIGENOBU

Examiner

Stephen A. Holzen

Art Unit

3644

*New*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 3/10/2004
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 5-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, with respect to claims 1-4 have been fully considered and are persuasive. The 101 rejections of claims 1-4 have been withdrawn.

### ***Election/Restrictions***

2. Applicant's election with traverse of the election required in the reply filed on 10/23/2004 is acknowledged. The traversal is on the ground(s) that restriction would place a serious burden on the applicant to prosecute and maintain three divisional applications. This is not found persuasive because the search and examination of the separate group would place a serious burden on the examiner.

3. The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Art Unit: 3644

While the specification enables a semiconductor chip **mounted** to the circuit board, the specification does not enable a semiconductor chip **provided on** a circuit board. The phrase "provided on" is not enabled, and the scope of this phrase is unclear.

6. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicant does not disclose the following limitation in his specification "collecting separated said semiconductor device." Instead the applicant discloses --collecting a semiconductor chip--.

7. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicant does not enable "giving a reward for the separate collection to the user ", instead (evidence by 9, line 15 of the specification, "the manufacturer or service organization rewards the user for the report". (The applicant enables the reporting step and not the collecting step.)

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 3644

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

9. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed method steps do not clearly disclose the relationship of the steps involved. Are the steps accomplished sequentially? Are the limitations drawn to actions of a user, a manufacturer, or another third party? Is the Manufacturer dismounting the semiconductor chip so that a user can report the predetermined information?

Claims 1, 2, and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claims 1, 2 and 4 recite the limitation "said user" and "the user" in these claims. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 4 recites the limitation "who sent said label". However there is no step requiring the user to send the label.

12. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See

Art Unit: 3644

MPEP § 2172.01. The omitted steps are: a user sending a report. As disclosed in the specification this step is essential to the understanding and use of the invention.

13. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: a semiconductor chip. Throughout the claims, the applicant has recited the element "semiconductor device" however his specification makes clear that his invention is not concerned with the semiconductor device, but instead a semiconductor chip.

14. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The order of the method steps is not sequential. Step (a) is written in the past tense, and should be rewritten in the present tense. It is not clear when this step is happening/occurring. Previous to what?

15. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Step (b) is not clear. Who is in fact dismounting the semiconductor device? Is the manufacturer or service provider or is the user?

Art Unit: 3644

16. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "which faces said printed board" does not clearly define the invention. Is it the semiconductor device, which faces the printed board, or is it the package surface of the semiconductor device, which faces the printed board?

17. Claim 2 recites the limitation "the package surface facing said printed board" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim. It appears the applicant is referring back to claim 1 where it is he states "providing predetermined information on a package surface of said semiconductor device which faces said printed board", however as discussed above, the phrase "which faces said printed board" is confusing and does not clearly define the relationship of the package surface, the printed board, and the predetermined information.

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanase (11-212471) in view of Tsunenari et al (2002/0013744). Yanase disclose an previously providing predetermine information on a package surface of a semiconductor

Art Unit: 3644

device, where the semiconductor device faces the circuit board (see paragraph 0003), dismounting said device so that said device can be separately collected (see abstract), receiving a report based on said predetermined information from an operator. Although Yanase does not disclose the actual collecting of the separated device, Tsunenari et al teaches that it is known to submit a product to a specific location for the recycling procedure. It would have been obvious at the time of the invention to one having ordinary skill in the art to include the teachings of Tsunenari et al into the method of Yanase for the purpose of increasing the ease at which a user may recycle a recyclable product.

- a. Re – Claim 2: Tsunenari et al discloses a service number on the package surface (see paragraphs 57 and 58), and giving a reward for the collection of the recyclable
- b. Re – Claim 3: Tsunenari et al discloses accepting a report through a communications network (see Figure 1)
- c. Re – claim 4: Tsunenari et al discloses sticking a label as the information on the package surface, (see model number) and giving a reward for the separate collection to the user who sent said label (see Figure 1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen A. Holzen whose telephone number is 703-308-2484. The examiner can normally be reached on M-F 7:30 - 5:00.



Art Unit: 3644

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 703 305-7421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sah

  
**TERI P. LUU**  
**SUPERVISORY PRIMARY EXAMINER**